Source of Data

The data used for the analysis below comes from InfoScan, a scanner-based retail sales tracking service provided by Information Resources Incorporated. The data are projected to represent 100 percent of sales in U.S. supermarkets that have at least \$2 million in sales annually, in drugstores representing 100 percent of nonprescription sales, and in mass merchandiser stores belonging to chains that sell at least \$200 million annually.

InfoScan is based on weekly retail scanner information from a sample of 11,300 supermarkets, 7,500 drugstores, and 288 mass merchandisers across the United States. The retail stores in the sample are statistically selected and must meet strict data quality standards. Once a week, the sampled retailers provide retail scanner data, including the price and description of all products scanned in these stores during that week. In addition, an extensive network of professional field auditors collects weekly information on promotional activities from all sample stores. This information is used to differentiate everyday volume from volume due to promotional activity, as well as to quality-check the data and to ensure that changes in volume correlate to the relevant in-store promotional activity.

After the data are reviewed and checked for errors or inconsistencies, InfoScan applies projection factors to extrapolate total volume of product sold and total dollar sales of the product for chains, market areas, regions, and the total United States. Supermarket data are projected to 64 market areas (fig. 3). The market areas are sets of counties selected on the basis of their retail trading environment. The market area data are then combined with data from sample stores representing the counties outside the 64 market areas to project regional and national supermarket sales. Drug and mass merchandise sales projections are created in a similar manner, with the exception that local market areas are not projected; rather, individual store-level data are projected directly to eight standard regions, that, when combined, reflect the total for the United States.

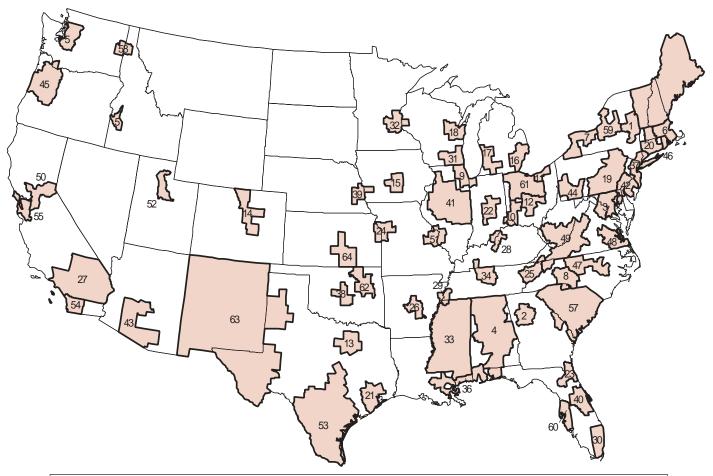
The InfoScan infant formula category includes information on dollar sales, unit sales, volume sales, and prices per unit for over 500 distinct items. These items are unique in terms of such characteristics as product brand, package size, product form, and product base and usually conform to a unique universal product

code (UPC). One exception to the correspondence of individual items and UPC codes is private-label items. In this case, items are grouped by unique package characteristics. Consequently, individual private-label brands or store labels are not identified. Fortunately, this does not create a problem for this study because PBM was the only company marketing private-label infant formula in 2000. As a result, InfoScan private-label infant formula as well as all infant formula identified as being manufactured by Wyeth was coded as PBM infant formula (all PBM infant formula is manufactured by Wyeth).

Each item in the infant formula category on the Info-Scan data base was examined by ERS analysts and classified as to type: standard formula (382 items), specialized formula (58 items), or not infant formula (90 items). As defined in this report, standard infant formula includes milk-based and soy-based infant formulas, excluding specialized infant formula, that meet the nutritional needs of most full-term, healthy infants less than 1 year old. Specialized formula includes formula for children with special nutritional requirements, such as hypoallergenic formula, thickened formula, formula to treat diarrhea, formula for premature babies, formula for infants with other diseases or disorders such as PKU, as well as lactose-free (nonsoy) formula, and formula marketed to toddlers 1 year or older. The terms "standard" and "specialized" were developed for this report to categorize types of infant formula. They do not coincide with categories used either for the regulation of infant formula or in the administration of the WIC infant formula rebate program. Items determined not to be infant formula, such as Pedialyte and other electrolyte maintenance solutions, were excluded from this analysis. Each formula item was further classified as to the product base (milk, soy, or protein hydrolysate), and product form (liquid concentrate, powder, or ready-to-feed). ERS further processed the InfoScan data to convert the volume measures to single strength equivalents. Each ounce of liquid concentrate is equivalent to 2 ounces of readyto-feed formula. Conversion factors for powder formula range from 7.08 to 7.5, depending on brand and product base.

Infant formula prices reported in this study are converted to apply to a standard unit of volume, 26 ounces of ready-to-feed formula. This volume was chosen as the standard because it is the ready-to-feed equivalent of a 13-ounce can of concentrate, the unit size used most often in other studies of infant formula pricing.

Figure 3 Market areas, 2000



1 Albany
i Albany

2 Atlanta

3 Baltimore-Washington

4 Birmingham-Montgomery

5 Boise

6 Boston

7 Buffalo-Rochester

8 Charlotte

9 Chicago

10 Cincinnati-Dayton

11 Cleveland

12 Columbus

13 Dallas-Ft. Worth

14 Denver

15 Des Moines

16 Detroit

17 Grand Rapids

18 Green Bay

19 Harrisburg-Scranton

20 Hartford-Springfield

21 Houston

22 Indianapolis

23 Jacksonville

24 Kansas City

25 Knoxville

26 Little Rock

27 Los Angeles

28 Louisville

29 Memphis

30 Miami-Ft. Lauderdale

31 Milwaukee

32 Minneapolis-St. Paul

33 Mississippi

34 Nashville

35 New England

36 New Orleans-Mobile

37 New York

38 Oklahoma City

39 Omaha

40 Orlando

41 Peoria-Springfield

42 Philadelphia

43 Phoenix-Tucson

44 Pittsburgh

45 Portland, OR

46 Providence

47 Raleigh-Greensboro

48 Richmond-Norfolk

49 Roanoke

50 Sacramento

51 St. Louis

52 Salt Lake City

53 San Antonio-Corpus Christi

54 San Diego

55 San Francisco-Oakland

56 Seattle-Tacoma

57 South Carolina

58 Spokane

59 Syracuse

60 Tampa-St. Petersburg

61 Toledo

62 Tulsa

63 West Texas-New Mexico

64 Wichita

Source: Information Resources Incorporated.

This conversion allows one to easily compare retail costs for different package sizes and product forms. The price is calculated by dividing dollar sales by volume sales in single-strength, ready-to-feed equivalents. This procedure creates a volume-weighted average price. Infant formula sales and volume figures for year 2000 are annualized based on data available from InfoScan for the first three quarters of the year, the most recent data available at the time the study was initiated.

Limitations of the Data

The InfoScan data are not available at the State level. In some cases, the 64 market areas span State boundaries. Whereas 41 of the 64 market areas fall within the boundaries of a single State, the remaining 23 cover more than one State (e.g., the Philadelphia market area includes parts of Pennsylvania, New Jersey, Delaware, and Maryland). Seven States—Alaska, Hawaii, Montana, Nevada, North Dakota, South Dakota, and Wyoming—are not included in any of the 64 market areas.

Another limitation of the data for this study is that only supermarket data are projected to the market area level; sales data from drugstores and mass merchandisers are available at the national level only. Drugstores and mass merchandisers account for a considerable—and increasing—proportion of all infant formula sales, amounting to nearly 29 percent of dollar sales and 32 percent of volume sales of all infant formula in 2000.

InfoScan data do not measure sales in convenience and food stores with less than \$2 million in sales annually and nonfood stores that sell baby food, such as Toys "R" Us. In addition, consumers can now order infant formula through the Internet, often at a discount. The contribution of these other outlets of infant formula to total volume sales or prices is unknown, but it is believed to account for only a small proportion of overall sales of infant formula in the United States.

This study's analysis of InfoScan data was limited to the years 1994 through 2000. Prior to 1994, information on mass merchandisers was not collected. In 1994, most WIC State agencies (excluding Indian State agencies with 1,000 or fewer participants) operated sole-source competitive infant-formula rebate systems (see Appendix A).